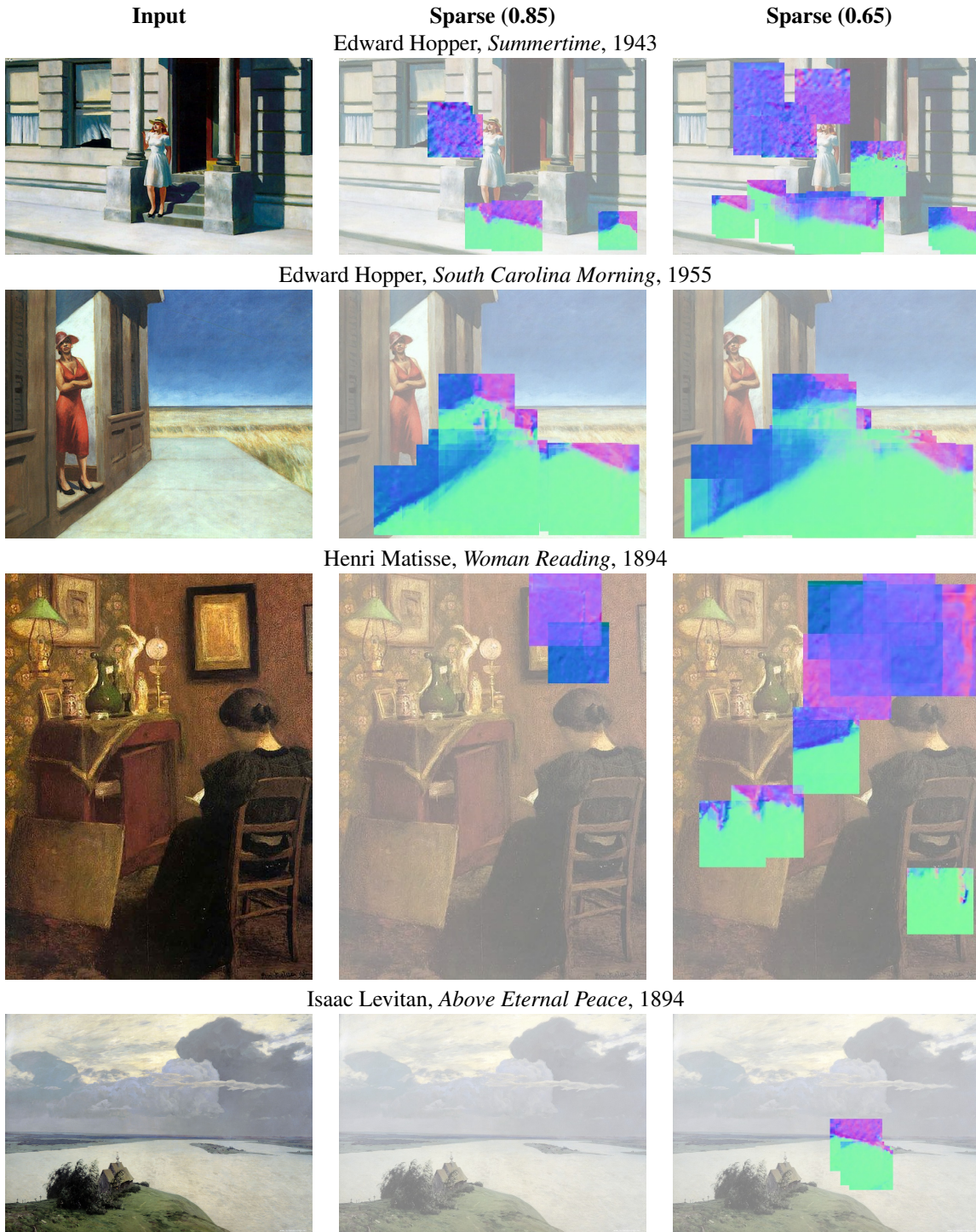# Data-Driven 3D Primitives for Single Image Understanding
## Selected Art Examples
### David F. Fouhey, Abhinav Gupta, Martial Hebert

Here, we provide a few examples of the system run on selected pieces of art for fun. The system works remarkably well on some pictures (and like David, it seems to like Edward Hopper), although it struggles on many pictures as well. In many cases (including images not shown), it decides not to predict such as on *Above Eternal Peace* by Levitan. Note that this is frequently the correct decision. The mistakes, however, are often interesting: the textured robes in Fra Angelico's *Annunciation* are confused for a chair; and the middle parts of the cabinet in Matisse's *Woman Reading* are confused multiple times for the intersection of a piece of furniture and the floor.
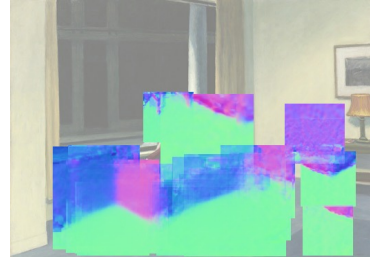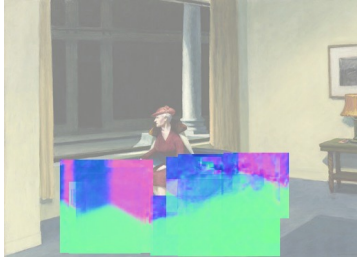
| **Input** | **Sparse (0.85)** | **Sparse (0.65)** |
|---|---|---|

Edward Hopper, *Summertime*, 1943

Edward Hopper, *South Carolina Morning*, 1955

Henri Matisse, *Woman Reading*, 1894

Isaac Levitan, *Above Eternal Peace*, 1894

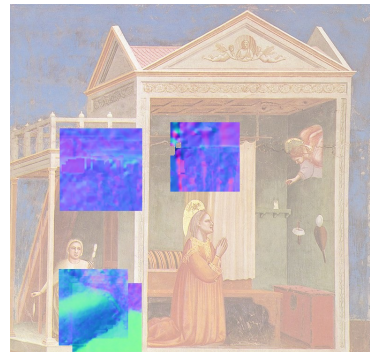| **Input** | **Sparse (0.85)** | **Sparse (0.65)** |

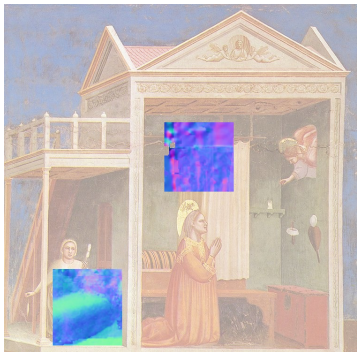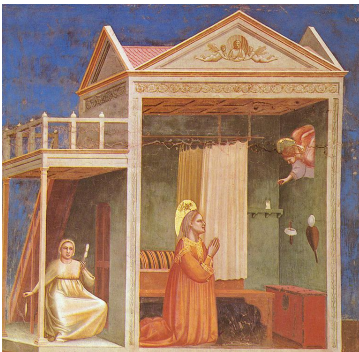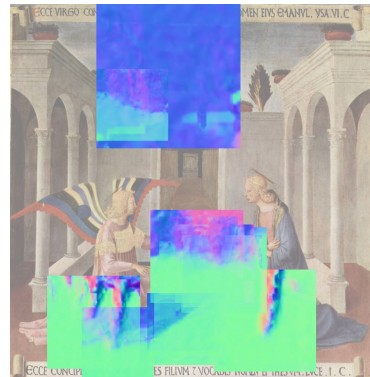Edward Hopper, *Excursion into Philosophy*, 1959
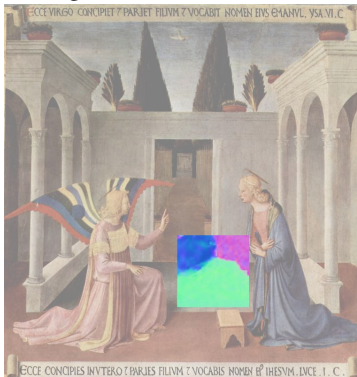


Edward Hopper, *Hotel Window*, 1955



Paul Cézanne, *Paul Alexis Reading a Manuscript to Zola*, 1969



Giotto, *Annunciation to St. Anne*, c. 1305
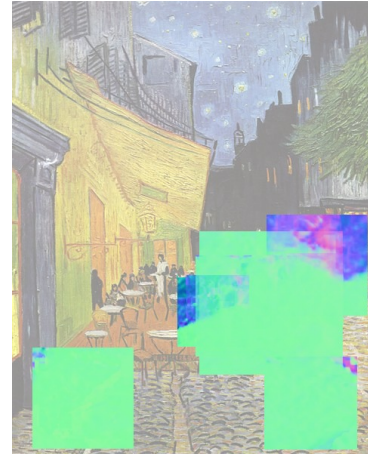


Fra Angelico, *Annunciation*, c. 1450

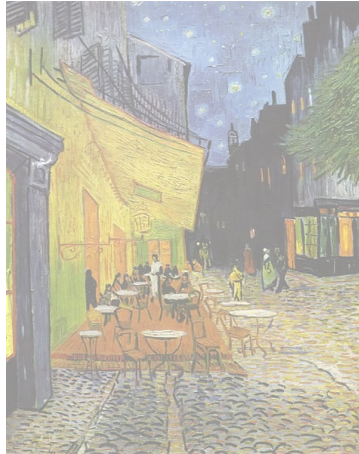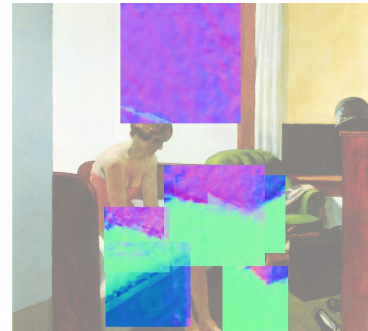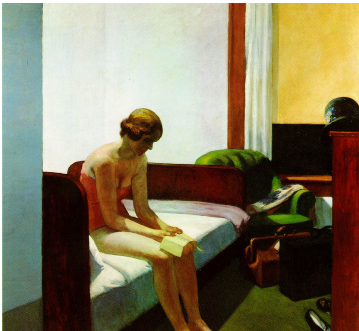| **Input** | **Sparse (0.85)** | **Sparse (0.65)** |
|:---:|:---:|:---:|

Ilya Repin, *Unexpected Return*, 1884



Vincent Van Gogh, *Cafe Terrace at Night*, 1888



Edward Hopper, *Hotel Room*, 1931



Vincent Van Gogh, *The Night Cafe*, 1888